

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004345**Date Inspected:** 01-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Yamtei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower/OGB**Summary of Items Observed:**

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing island, China for the purpose of observing and monitoring the fabrication of the Orthotropic Box Girders (OBG)and Tower.

**Heavy Shop Bay 1**

The Quality Assurance Inspector performed 10% random ultrasonic testing verification on longitudinal stiffener splice welds. The Quality Assurance Inspector performed the testing on the following welds; SSD1-SA163 A/D 27B, SSD1-SA163 A/D-3B, SSD1-SA163 A/D 20B, SSD1-SA163 B/D 1A. See Caltrans report TL-6027 Ultrasonic Testing Report, dated October 1, 2008 for additional information.

The Quality Assurance Inspector observed ZPMC personnel in process of performing fit up operations on south tower skin plate A to diaphragms plate assemblies.

The Quality Assurance Inspector observed ZPMC in process of performing thermal cutting on skin plate SA164 south tower.

**Heavy Shop 2****Skin D East Tower Assemblies**

The Quality Assurance Inspector observed ZPMC Caltrans approved welders 061928 and 056975, utilizing the

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flux core arc welding (FCAW) process on longitudinal stiffener to skin plate D weld number ESDI-SA376 A/Z 3B.

The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2221-B-U3-5-7.

The Quality Assurance Inspector observed ZPMC personnel in process of performing fit up operations on skin plates A,B, and C to diaphragm plate assemblies.

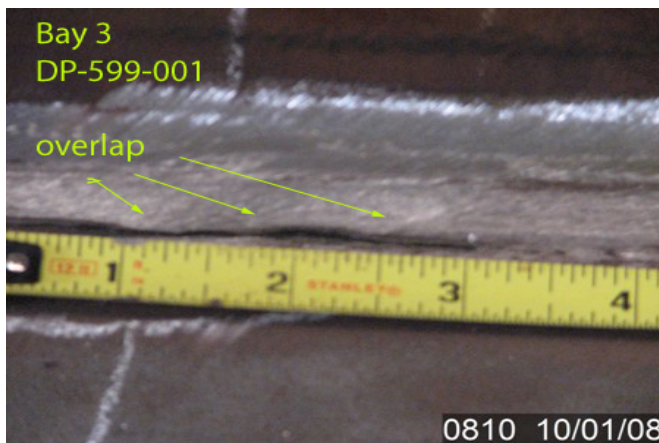
The Quality Assurance Inspector observed thermal cutting floor beam plate FB12.

The Quality Assurance Inspector observed ZPMC personnel in process of grinding completed weld cover passes on skin plate D east tower assembly.

### Bay 3

The Quality Assurance Inspector observed ZPMC grinding and performing flux core arc welding (FCAW) on visual weld repairs on Orthotropic Box Girder (OBG) DP 564-001.

The Quality Assurance Inspector performed a random final visual observation on Orthotropic Box Girders (OBG) DP-599-001, DP-164-001, DP-609-001, and DP-564-001. The Quality Assurance Inspector observed several areas of overlap. ZPMC and American Bridge/Fluor Quality Control Inspector agreed with the visual observations found by the Quality Assurance Inspector. ZMPC Quality Control Inspector informed the Quality Assurance Inspector, the area will be repaired. The Quality Assurance performed a visual observation on the areas that were repaired. The observations performed by the Quality Assurance Inspector appears to meet contract requirements.



### Summary of Conversations:

No relevant conversations on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (707) 649-5453, who represents the Office of Structural Materials for your project.

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**Inspected By:** Lara,Raymond

Quality Assurance Inspector

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**Reviewed By:** Wright,Mark

QA Reviewer